North Carolina Board of Transportation Environmental Planning and Policy Committee Meeting Minutes for January 31, 2007

A meeting of the Environmental Planning and Policy Committee (EPPC) was held January 31, 2007 at 8:30 AM in the Board Room (Room 150) of the Transportation Building. Board Member Nina Szlosberg chaired the meeting. Other Board of Transportation members that attended were:

Tom Betts Nancy Dunn
Conrad Burrell Doug Galyon
Mac Campbell Larry Helms
Bob Collier Andrew Perkins
Marion Cowell Lanny Wilson

Other attendees included:

Eddie Dancausse Allen Pope Marshall Dobson **Amy Simes** Ehren Meister Mike Mills Art McMillan Glenn Dennison Mike Pettyjohn Barry Moose Greg Thorpe Pat Ivey Berry Jenkins Jay Swain Phil Harris Priscilla Tyree Beth Neely Jim Snakenberg Bill Gilmore Joel Setzer Ricky Greene Rob Hanson Bill Rosser John Sullivan C.A. Gardner Jon Nance Shannon Lasater Daniel Keel Julie Hunkins Tad Boggs Debbie Barbour Kathleen Stahl Tammye Davis Dempsey Benton Tim Johnson Larry Goode Don Lee Larry Shirley Wally Bowman Don Voelker Lyndo Tippett Willie Riddick Donna Dancausse Marie Sutton

Ms. Szlosberg called the meeting to order at 8:30 AM and circulated the attendance sheet. She opened by accepting a motion to approve the meeting minutes from the January 10, 2007 committee meeting. The minutes were approved as presented.

Ms. Szlosberg began by noting the first item on the agenda is an update on the Interagency Leadership Team (ILT). She noted that over the last six years, since Governor Easley took office, one of the priorities has been to continue to move the transportation program forward while being good environmental stewards. One of the many items developed to support this cause was the creation of the ILT. Ms. Szlosberg then turned the meeting over to John Sullivan, Division Administrator for the

Federal Highway Administration – North Carolina Division, to present an update on the ILT and the three goals and activities.

Mr. Sullivan began by noting that before his retirement, Len Sanderson was scheduled to be the chairperson in 2007, however he and Debbie Barbour, have been elected to be co-chairs this year in Mr. Sanderson's place. The outgoing chairperson is Dempsey Benton. Mr. Sullivan introduced Mr. Benton, Chief Deputy Secretary for the Department of Environment and Natural Resources (DENR), to summarize Goal 1 of the ILT – develop a comprehensive shared GIS database.

Mr. Benton thanked the committee for the opportunity to speak and noted that he would comment on the GIS initiative as part of the ILT. Since the last briefing, the business case has been presented to the Governor's Office and the Office of the State Budget. The ILT has received several letters in support of the GIS initiative from local governments and MPO/RPOs. A challenge thus far has been to communicate that this initiative is an executive agency proposal and not just a DENR proposal. Mr. Benton noted that much progress has been made and the team looks forward to the release of the Governor's budget with some consideration of the initiative. Mr. Benton believes there will be continued executive level support for the GIS initiative statewide. He concluded by noting that it has been a privilege to be a part of the ILT and looks forward to their continued success.

Mr. Sullivan thanked Mr. Benton, on behalf of the entire team, for his leadership and efforts to move the ILT forward and wished him well in his retirement. Mr. Sullivan summarized the ILT's Goal 2 – to integrate local land use and long-range transportation planning. He noted that this goal will help identify transportation and land use challenges and ways to prepare for them. This is critical because the state continues to see population increases and its effect on transportation. One of the goal's intentions is to allow for greater participation from stakeholders to help identify goals and activities in the planning process and land use. There are currently two pilot projects on going. One is in Brunswick County and a second one is in Fayetteville. Each pilot project has brought together the local planning staff and state and federal transportation planners to develop individual comprehensive transportation plans (CTPs). The overall target is to bring final CTPs from these areas to the Board of Transportation for approval later this year. Education and outreach will continue to be an important part of this goal as well.

Mr. Sullivan noted Goal 3 of the ILT – to improve the Merger 01 Process. Several accomplishments have occurred including the development of Merger roles and responsibilities, the development of a conflict resolution process in the event concurrence can't be met, and the development of Merger training for all process participants. Finally, Mr. Sullivan noted that the development of performance measures will be critical and will allow for better management and accountability of the Merger process. Measures are currently being developed and will be finalized at an upcoming ILT meeting. Next steps for the Merger process it to continue the training and to manage the process.

Ms. Szlosberg asked the committee if there were any questions. She asked Mr. Benton to remind the committee of the projected cost of the GIS initiative. Mr. Benton noted that the overall package (over five years) that was submitted was \$38 million and for fiscal year 2007-08 it was \$8.2 million. Ms. Szlosberg thanked the team for briefing the committee on the ILT.

Ms. Szlosberg noted that the ILT agenda item was also a way to get Mr. Benton to the committee meeting to recognize him. She commented that as most members know, January 31st is Mr. Benton's last day with state government and he will be retiring effective tomorrow. Ms. Szlosberg wanted to thank Mr. Benton for his effort in partnering with the Department of Transportation on so many levels and for his dedication to improving the environment we live in. Ms. Szlosberg invited Mr. Benton to the podium to receive special recognition from Transportation Secretary Lyndo Tippett and Board of Transportation Chairman Doug Galyon. Secretary Tippett commented that when Governor Easley appointed his administration that one of his priorities was North Carolina's natural resources. To accomplish this task it was important to form a partnership with DENR Secretary Bill Ross and Chief Deputy Secretary Benton. He noted that through Mr. Benton's leadership the DOT and DENR have made great strides in accomplishing initiatives together, most notably the formation of the Ecosystem Enhancement Program and the development of the Merger 01 Process.

Chairman Galyon reiterated the comments of the Secretary and summarized the positive changes that have occurred with the Department's relationship with DENR over the last 16 years. Chairman Galyon noted that under the leadership of Bill Ross and Mr. Benton over the last five or six years the two departments have an outstanding relationship together and are now working together for the future of North Carolina. Mr. Galyon concluded by wishing Mr. Benton well in his retirement. Secretary Tippett presented Mr. Benton with a special certificate of appreciation for his leadership and partnership with the Department of Transportation.

Mr. Benton made a few comments thanking NCDOT for its support and noting his enjoyment of working with the many great DOT employees over the last six years.

Ms. Szlosberg introduced the next agenda item and noted its significance in North Carolina and the ability for state government to become more financially efficient while protecting the environment at the same time. Ms. Szlosberg introduced Larry Shirley, Director of the State Energy Office, Department of Administration, to talk about the North Carolina Energy Plan and some of the many ways to reduce North Carolina's energy use.

Mr. Shirley began by noting the State Energy Office's history and mission. They are the lead office for alternative fuels, renewable energy, energy efficiency and emergency energy response, such as oil supply disruption during Hurricane Katrina. Mr. Shirley shared some general energy trends. As the state population increases, energy demand also rises. North Carolina's residential energy consumption is expected to increase by about 50% by 2020. As NC increases its energy needs, it must make a choice to decrease its reliance on fossil fuels, increase energy conservation and efficiency and turn to cleaner, more sustainable alternatives to fossil fuels. Mr. Shirley summarized other energy trends, including the international demand on oil and the U.S. production of oil compared to importing. North Carolina's dependence of oil from other regions was evident in the Hurricane Katrina oil supply disruption last year.

Energy use and consumption can be directly related to air quality and global warming, therefore effecting sea level rise. Energy use has a direct economic impact on the state economy. Sea level in North Carolina is expected to rise by twenty-seven inches by 2100, causing extensive erosion along the state's

3,375-mile shoreline. Mr. Shirley presented a map that shows where inundation of NC's coastline is expected to occur. Sea level rise will have devastating impacts to NC's coastal tourism industry and will put billions of dollars in property at risk. It will be a critical element in the future for coastal development and the construction of roads and highways.

Mr. Shirley commented that because of the many factors involved with energy that have the potential to impact North Carolina, the State Energy Plan was developed in 2003 and updated in 2005. A copy of the Plan was provided to the Board members. The Plan developed the NC Energy Policy Council and established a Comprehensive Energy Policy for NC. It also developed 92 recommendations with 20 top priorities. The Plan is revised annually and can be accessed at www.EnergyNC.net.

Energy efficiency is one of the most critical elements that the state and individuals can do to improve energy dependency and cost efficiency. One of the first things that the state should do is review its buildings for energy efficiency. In 2001, a law was enacted that directed each state agency to develop an energy plan in accordance with the state plan. The overall state goal is to reduce the state's energy consumption by 20 percent over a 5-year period (at the end of 2008). Mr. Shirley noted that the state will probably achieve this goal with a little more effort. The plan establishes that each state agency must have an "energy liaison." He noted that NCDOT has one of the best liaisons in state government, Kathleen Stahl.

Mr. Shirley noted that strategic energy plans have been developed at 17 universities and 25 agencies saving the state \$30 million (as of July 2005). Energy-saving techniques that agencies can implement to become more efficient include:

- Utility Accounting
- Energy Surveys
- Training for State Employees
- Strategic Energy Planning
- Conservation Awareness Teams
- Performance Contracting
- Boiler Technical Assistance
- Steam Trap Surveys
- HVAC Controls Tune-ups

Financial resources are also available to fund these programs. Mr. Shirley elaborated on the HVAC Controls Tune-ups program and the huge potential savings it has and the reduction of negative impacts to the environment. The program highlights include:

- Vendor tunes up HVAC controls
- 2-day fee split 50-50 with agency
- Savings can be 15-20%
- Less than a one-year payback
- 270 buildings signed up
- Training of agency technicians

To date over a half million dollars have been saved annually with the program estimated to save a total of \$2.5 million. Mr. Shirley elaborated on other simple programs that have saved the state dollars, including DOT traffic signals being changed to LED lights. He provided additional trend data on North Carolina's energy consumption and utility costs. The trend indicates that energy use and utility costs will continue to increase if agencies don't take action. One simple way to start is to make all new building construction as energy efficient as possible. In conclusion, Mr. Shirley elaborated that the resources are there for improvement and all it takes is action.

Ms. Szlosberg introduced Priscilla Tyree, NCDOT Plant Engineer, to introduce NCDOT's Energy Plan and what activities the Department is doing to become more energy efficient. Ms. Tyree stated that her unit is responsible for designing most of the buildings where NCDOT employees work and interact with the public and maintaining the NCDOT buildings in the downtown Raleigh area, and DMV and State Highway Patrol buildings statewide. She also noted that they complete small construction projects including new construction (salt storage sheds for example), renovations (rest areas and welcome centers), and minor repairs. Ms. Tyree introduced Kathleen Stahl, NCDOT Energy Management Engineer, to give more details on NCDOT's successes and activities.

Ms. Stahl opened by commenting that she will be presenting NCDOT's Energy Plan. She began by noting that NCDOT spent \$14.5 million on energy and water/sewer in fiscal year 2005-06. This includes servicing over 2,700 building and 14,000 employees or an estimated cost of \$1,000 spent per employee annually. She elaborated on the age and square footage of NCDOT buildings and correlated it to energy efficiency.

NCDOT's Strategic Energy Plan was signed in 2003 by Secretary Tippett to reduce energy use by 20% over five years. The Plan established an Energy Management Engineer position to implement efficiency programs, identified that energy efficiency is a team effort among Management, Facilities Design, Operations & Maintenance, Public Information, Waste Management, Fiscal, IT, Office of Environmental Quality, and all employees, and set a reporting and update schedule.

Ms. Stahl provided more detail on the breakdown of NCDOT's utility costs by divisions, buildings, and type of energy used (water, heating fuels, and electricity). She noted what the impact of a reduction of 20 percent would look like. If 20 percent were achieved during the 5-year period, it would be a reduction (or cost avoidance) of \$1.93 million. This is equal to \$386,887 energy costs avoided annual. The savings is cumulative and can be an enormous financial benefit.

The NCDOT Energy Plan focuses on three areas:

- Accounting: Expect to have a 1-2% cost reduction through utility bills matched to building data, benchmarks, metrics (dollars per square foot) and optimized rates
- Buildings: Expect to have a 12-15% usage reduction through operations, maintenance and design
- People: Expect to have a 5-10% usage reduction (possibly up to 20%) through communication, education and organizational culture

The action items identified in the Plan for accounting include:

- Review of utility bills and accounts by Fiscal and Business Officers
- Refund of \$26,000 from the Airport Authority (an overpaid utility bill)
- Refund in progress of \$30,000 for closed accounts on previously leased buildings
- Spot water leaks: refund of \$14,000 from municipal water
- New SAP Maintenance and Utility Module for prioritizing building energy improvements

The action items identified in the Plan for buildings at NCDOT include:

- Lighting changes from T-12 magnetic ballast to T-8 electronic ballast with dual switches
- Programmable thermostats in DMV offices for night and weekend setback
- · Higher efficiency replacement air conditioners
- New buildings to meet or exceed energy code
- · Vending machine lights turned off in well lit areas
- · Power off computer monitors when not in use
- Compact fluorescent lamps the "Change a Light" campaign

Ms. Stahl noted that the Office of Environmental Quality recently spearheaded an effort to replace over 50 light bulbs on the first floor of the Transportation Building saving the Department over \$500 annually in electricity costs on just one floor. She challenged other floors, buildings, and offices to become "energy champions" and to do the same.

The action items identified in the Plan for NCDOT employees include:

- Contest for "Catchy Phrase" to encourage energy efficiency for DOT
- "Turn it off" stickers and posters to be placed at light switches
- "In The Loop" employee newsletter articles and tips
- Portal link (employee intranet) for DOT energy information
- Post annual Strategic Energy Plan online
- Promote Continuous Process Improvement Awards and Best Practices
- Meeting agendas (have energy efficiency discussed at various staff meetings)
- New employee orientation

Ms. Stahl summarized that energy efficiency is a priority and is simple to positively effect. She noted that there is assistance available from her office to perform energy surveys of selected buildings, to develop utility expenditure reports, to review bills for active accounts or closed old accounts, to identify better rates and to evaluate the energy efficiency of new equipment. She also noted that her office is currently working on developing division reports ranking energy usage per square foot and cost per square feet from SAP. This will allow the Department to prioritize buildings for energy improvements.

Ms. Stahl ended the presentation by showing the committee the program's new logo and catch phrase, "NCDOT WastEnders: working together to save water and energy."

Ms. Szlosberg asked the committee for any questions and summarized the presentation by encouraging each division and office to take advantage of the offer to perform energy audits. Seeing no questions, Ms. Szlosberg accepted a motion to adjourn the meeting at 9:30 AM.

The next meeting for the Environmental Planning and Policy Committee is scheduled for February 28, 2007 at 8:30 AM in the Board Room (Room 150) of the Transportation Building.